February 04, 2014

MEMORANDUM FOR: NCEP Model Implementation Scientific Review Team

FROM: Chris Caruso Magee, Team Lead, Production Control
Production Management Branch, NCEP Central Operations

SUBJECT: Proposed Implementation of North American Ensemble Forecast System v4.0.1

The Environmental Modeling Center (EMC) of the National Centers for Environmental Predication has proposed implementation of the North American Ensemble Forecast System (NAEFS) v4.0.1.

The NAEFS v4.0.1 consists of the NCEP Global Ensemble Forecast System (GEFS) and the Canadian Meteorological Centre's global ensemble system. The objective of this upgrade is to improve the probabilistic forecast skill of the GEFS, which will be accomplished by adding new products within GEFS/GFS and NAEFS.

Please see the NAEFS Technical Implementation Notice (details below) for specifics on this new model.

Real time parallel data:

Beginning Tuesday, February 4, 2014 and starting with the 1800Z cycle, a consistent parallel feed of data will be available at:

HTTP:
http://www.ftp.ncep.noaa.gov/data/nccf/com/gens/para/naefs.YYYYMMDD
http://www.ftp.ncep.noaa.gov/data/nccf/com/gens/para/gefs.YYYYMMDD

FTP:
ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/gens/para/naefs.YYYYMMDD
ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/gens/para/gefs.YYYYMMDD

where YYYYMMDD is the year, month, day.

Technical Implementation Notices

The Technical Implementation Notice (TIN) for the NAEFS v4.0.1 is available at:

http://www.nws.noaa.gov/os/notification/tin14-04naefs.htm

Request for Evaluation

Please complete the attached "Intent to Participate" form and return it to Chris.Caruso.Magee@noaa.gov no later than February 11, 2014. NCO requires an intent form be filed by all NCEP Service Centers. WPC, SPC, CPC, NWS Eastern and Alaska Regions, and First Energy are listed as being primarily responsible for this evaluation. All other NCEP Service Centers are optional, as are NWS WFOs, government agencies, or private companies not listed above.

For the NCEP Service Centers, if, in your estimation, the implementation of this upgrade of the NAEFS would have little or no impact on the forecast process at your Service Center, simply indicate that you do not intend to participate in the subjective evaluation and return the form.

The 30-day evaluation period will start at 18Z on Tuesday, February 4, 2014 and run through March 6, 2014. Participants need to complete the attached "Model Implementation Subjective Evaluation Report" form and return to Chris.Caruso.Magee@noaa.gov no later than March 13, 2014. Please indicate the overall performance of the product, with any additional comments on specific cases with noteworthy positive or negative performance. Please note that NCO requires evaluators to specifically address the benefits stated in the attached form as to whether those benefits were observed or not. Any feedback you wish to provide during the evaluation period should be emailed to Chris.Caruso.Magee@noaa.gov .

A final coordination teleconference will be scheduled to review the evaluation and address any outstanding issues. Based on the outcome of that teleconference, NOS and NCO will prepare a recommendation for the NCEP Director. This teleconference has not yet been scheduled.

Points of Contact

Chris.Caruso.Magee@noaa.gov (NCO)

Yuejian.Zhu@noaa.gov (EMC)

Bo.Cui@noaa.gov (EMC)

Intent To Participate
Model Implementation Subjective Evaluation

Scientific Review Team Member: _____

Team Member E-mail: _____

Region/Service Center/Company Representing:_____

(Govt Only) Authorizing Official or
Service Center Director: _____

Intent to Participate:

____ Will Participate in the Evaluation

____ Will Not Participate in the Evaluation

Model Implementation Subjective Evaluation Report

Scientific Review Team Member: _____

Region/Service Center/Company Representing: _____

Proposed Change: NAEFS v4.0.1

Model Developer: Yuejian Zhu (EMC), Bo Cui (EMC)

Real-Time Parallel Runs:

General comments: _____

_____

_____

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_____

Evaluation of expected benefits:

Please respond to the following questions and note if they are beneficial to you?

1. Is the bias significantly reduced for the parameters you're evaluating? Please list parameters you've evaluated.

_____

_____

_____

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_____

2. Has the probabilistic forecast skill increased for the parameters you're evaluating? Please list parameters you've evaluated.

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_____

Recommendation:

Implement as proposed ___ **Reevaluate after changes ____**

Do not implement ___